

US-PAT-NO: 6394590

DOCUMENT-IDENTIFIER: US 6394590 B1  
\*\*See image for Certificate of Correction\*\*

TITLE: Replaceable liquid container

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Detailed Description Text - DETX (198):

FIGS. 64A, 64B and 64C show Embodiment 19, in which the ink chamber 4006 in Embodiment 16 is divided into two parts, and one of them (ink chamber 4007) is exchangeable. FIG. 64A shows the state in which the remaining amount detector is actuated as a result of the ink consumption. In this case, a fresh ink chamber 4007 is prepared, and replaces the ink chamber 4007. FIG. 64B shows the state in which the used-up ink chamber 4007 is removed, and a full fresh ink container is going to be mounted. In FIG. 64C, the exchange has been completed. At this time, a plug 4054 at the bottom of the ink chamber is opened by the injection port 4053 located at an upper position of the ink chamber 4006, so that the ink is supplied. By doing so, there is no need of using a pipette or injector, and therefore, the operators fingers are not contaminated. It is possible that the ink chamber 4004 and the ink chamber 4006 remain connected, so that a minimum number of parts are exchanged, which is advantageous from an economical standpoint.

Current US Original Classification - CCOR (1):  
347/86

US-PAT-NO: 6312073

DOCUMENT-IDENTIFIER: US 6312073 B1

TITLE: System for detecting an accurate amount of ink  
consumption in an ink jet recording device

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Abstract Text - ABTX (1):

A system for detecting an ink consumption in an ink jet recording device comprises a non-volatile memory for storing an accumulated amount of ink consumption, update section for incrementing the stored amount by a new amount of ink consumption, a comparator for comparing the accumulated amount against a variable reference amount, and a display section for displaying the accumulated amount of ink consumption or a residual amount of ink in the ink jet recording device. The recorded amount includes total ink consumption by nozzle cleaning, nozzle suction and ink discharge.

Current US Original Classification - CCOR (1):  
347/7

Current US Cross Reference Classification - CCXR (1):  
347/19